

UMC First Foundry to Introduce 0.18um 32 Volt High Voltage Process

August 22 2004

[UMC](#), a world leading semiconductor foundry, today announced the availability of the foundry industry's most advanced 0.18um embedded high voltage technology. This process targets the growing portable liquid crystal display ([LCD](#)) market, and can supply the different voltages required for the gate driver, source driver, controller and 4um² ultra dense SRAM cell resulting in a smaller footprint, one-chip solution. An additional non-volatile memory (NVM) feature, called Multiple Times Programmable (MTP) memory, can also be added to the process with the addition of just one extra mask step.

Joe Ko, Director of Customer Integration Engineering Division at UMC, said "UMC has consistently led in the introduction of both mainstream and specialty technologies to serve customers in a wide variety of market segments. We are continuing with our strong R & D efforts and are pleased to be the first foundry to provide 0.18um embedded high voltage technology."

The MTP memory feature allows customers to perform SRAM redundancy repair and fine tune each IC to ensure identical behavior throughout the wafer, potentially reducing overall cost and time to market. The MTP also gives customers the added flexibility to configure/reconfigure ICs for different applications since the NVM can be reprogrammed.

High voltage technology is a requirement for LCD products to turn on the transistors that are used to drive applications such as cell phone

displays. UMCJ, UMC's affiliate foundry company in Japan, has been producing customer 0.18um 20V high voltage products since the beginning of the year.

The single chip solution allowed by UMC means that these products could be made with a smaller form factor. UMC expects pilot production of customer LCD chips using 0.18um 32 volt technology to begin by the end of 2004.

Note Concerning Forward-Looking Statements

Some of the statements in the foregoing announcement are forward looking within the meaning of the U.S. Federal Securities laws, including statements about future outsourcing, wafer capacity, technologies, business relationships and market conditions. Investors are cautioned that actual events and results could differ materially from these statements as a result of a variety of factors, including conditions in the overall semiconductor market and economy; acceptance and demand for products; and technological and development risks.

Source: UMC

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